

REMARKS

Consideration of the amendments and remarks presented herein is respectfully requested.

I. Status of the Claims

Claims 1-8 and 42, 44, 45, 47, 53-59 are pending.

Claims 9-41, 43, 46, and 48-52 are canceled.

Applicants reserve the right to pursue at a later date in one or more continuing applications subject matter supported by the present disclosure, including subject matter which may be considered to be disclaimed herein.

II. Amendments to the Claims

Claim 1 has been amended to delete an obvious word-processing error, and to recite certain features of the claimed composition. Specifically, claim 1 has been amended to recite a pharmaceutical composition for delivery of NO to a human or animal. Basis for these features is found in the specification, e.g., at least in claim 6, and at page 13, lines 15-16. Claim 1 has also been amended to reflect the feature of an aluminosilicate zeolite that is partially or fully dehydrated; support for this feature is found in the specification, e.g., at page 4, line 30, and at page 9, lines 4-6, and in claim 10. Claim 1 has also been amended to recite particular extra-framework cations effective to strongly bind NO; basis for such cations is found in claim 2.

The remaining claims have been amended to similarly reflect a pharmaceutical composition to conform to the amendments to claim 1.

Claim 4 has been amended to include the well-known description of the three-letter framework code (Linde Type A). See, e.g., the specification at page 16, lines 16-17, as well as Baerlocher, Ch.; McCusker, L.B.; Olson, D.H., *The Atlas of Zeolite Framework Types*, 6th Ed., 2007 (Elsevier, published on behalf of the International Zeolite Association),

Table of Contents, page v, Framework Type Data Sheets (arranged by 3-letter code).
WEB address: <http://www.iza-structure.org/databases/>.

Similarly, claim 42 has been amended to include the well-known meaning of the abbreviation PET, referring to polyethylene terephthalate.

Claim 45 has been amended to conform to the language of amended claim 1, and to recite particular medical articles, basis for which is found in claim 47.

Claim 53 has been simplified to depend upon claim 45.

Claim 54 recites the pharmaceutical composition sealed in an airtight container. Support for this feature is found in the specification at page 9, lines 18-25. This claim highlights the feature of a pharmaceutical composition that is protected against exposure to moisture, to thereby prevent chemical displacement of NO by water and premature release of nitric oxide.

Support for dependent claims 55 and 56 is found in the specification as provided for claim 54 above.

Claim 57 recites particular framework structures by their 3-letter codes and a long-hand description that corresponds to the three-letter code. Basis for this claim is found in the specification at page 7, lines 23-29. The Examiner is also directed to at least the reference described under claim 4 above, which provides a simple table listing 3-letter framework codes and their description. The link provided in the specification at page 7, line 27, also provides for each framework type, associated unit cell information, channel information, pore size, etc.

Claim 58 recites particular valences for the extra-framework cations, basis for which is found in the specification at page 6, lines 14-18.

Claim 59 recites a particular range of aluminum-to-extra-framework cation ratios. Support for this feature is found in the specification, e.g., at page 16, lines 1-14.

No new matter has been added to the claims by virtue of the amendments presented herein.

III. Statement of Substance of Interview

A telephonic interview was held with Examiner Johnson on September 21, 2011 to generally discuss the outstanding Office action, cited art, and possible amendments to the claims. Participants included the undersigned, Susan T. Evans, and Examiner Johnson. No agreement was reached.

IV. Claim Rejections - 35 U.S.C. §112 Second Paragraph

Claims 1-8, 42-49 and 53 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it is the Examiner's view that, based upon the specification, it is not clear what the requirements are for a pharmaceutical, nutraceutical or cosmetically-acceptable carrier.

With respect to the instant rejection, the Examiner is reminded of the requirement to allow (or accept) claims having a reasonable degree of particularity and distinctness (MPEP 2173.02). Moreover, the definiteness of the claim language should be analyzed, not in a vacuum, but in light of (i) the content of the particular application disclosure, (ii) the teachings of the prior art, and (iii) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time of the invention. Finally, the Examiner is reminded that "a patent need not teach, and preferably omits, what is well known in the art". (Although cited with respect to enablement, see, e.g., *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984)).

The pending claims have been amended to recite more simply the presence of a pharmaceutically acceptable carrier. A generally accepted definition of "pharmaceutical excipients" is that they are additives used to convert pharmacologically active compounds into pharmaceutical dosage forms suitable for administration to patients (Norwood, D., et al., "Strategies for the Analysis of Pharmaceutical Excipients and Their Trace Level Impurities". *American Pharmaceutical Review*, 2011). Similarly, the following more detailed definition is provided, "Pharmaceutical excipients are inert substances used as diluent/vehicle/fillers/binders/bulk agent/lubricants for drug formulation", Kamath, S., "Regulatory Aspects of Pharmaceutical Excipients", WEB ADDRESS: <http://www.expresspharmaonline.com/20110215/market.03.shtml>. Moreover, a search of the USPTO patents database directed to the phrase, "pharmaceutically acceptable excipient", carried out on November 1, 2011, resulted in 7633 hits. (A similar search could also readily be carried out on published patent applications). A similar search directed to the phrase "pharmaceutically acceptable carrier" resulted in 57,498 hits. Thus, one skilled in the art could turn to any one of the over 65,000 patents resulting from the above-searches for a definition and/or examples of pharmaceutically acceptable excipients. Finally, carriers for pharmaceutical use are well known in the art. For example, the *Handbook of Pharmaceutical Excipients*, Eds. Rowe, R., Sheskey, P. and Owen, S.C., Pharmaceutical Press (2004), provides monographs on hundreds of pharmaceutical excipients.

In view of the foregoing, Applicants' submit that the scope of the current claims, directed to a pharmaceutical composition for delivery to a human or animal, where the composition comprises a pharmaceutically acceptable carrier, would be clearly understood by one skilled in the art of pharmaceuticals, when viewed in light of the disclosure, knowledge commonly available to one skilled in such art, and in the context of the current claims. Withdrawal of the rejection of the claims under 35 U.S.C. §112, second paragraph, is respectfully requested.

V. Claim Rejections - 35 U.S.C. §103

Rejection 1: Claims 1-3, 6-8, 42, 43 and 53 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Zhang *et al.* (Langmuir, 1993, 9, pp. 2337-2343) in view of Wu (US 5,492,883).

Rejection 2: Claims 1-3, 6, 43, 44, 46 and 49 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yamamoto *et al.* (JP 08092051 A) in view of Zhang and Green *et al.* (US 5,814,666).

Rejection 3: Claims 1-3, 45, 47, 48 and 53 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Barry *et al.* (US 2000/64506 A1) in view of Zhang and Green.

Rejection 4: Claims 4 and 5 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Zhang and Wu as applied to claim 1 above, and further in view of Rudolf *et al.* (Journal of Magnetic Resonance, 2002, 155, pp. 45-56).

This foregoing rejections are respectfully traversed in view of the following remarks.

A. Applicant's Claims

The claims as currently amended are directed to a pharmaceutical composition for storage and subsequent release of nitric oxide (NO) *for delivery to a human or animal* at body or room temperature.

The composition comprises a partially or fully dehydrated aluminosilicate zeolite and a pharmaceutically-acceptable carrier. The partially or fully dehydrated zeolite comprises (i) extra-framework cations selected from the group consisting of Ca, Mg, Fe, Cu, Ru, Rh, Co, Ni, Zn and Ag, effective to bind nitric oxide, and (ii) nitric oxide bound to the extra-framework cations, whereby the nitric oxide is released by displacement by moisture upon exposure of the composition to moisture at body or room temperature.

The claims as currently amended reflect an aluminosilicate zeolite that is fully or partially dehydrated. The feature of a fully or partially dehydrated zeolite is significant in that there are two types of adsorbed nitric oxide in zeolites, commonly referred to as "reversibly" and "irreversibly" adsorbed nitric oxide. "Reversible" adsorption of nitric oxide is a process by which the gas is weakly bound to the zeolite and is desorbed once the NO atmosphere used to load the gas into the zeolite material is removed. (In "reversible" binding, the adsorbate is weakly bound by a combination of Van der Waals forces and electrostatic forces. No covalent bonds are formed). In contrast, "irreversible" adsorption of NO is a process by which the gas is more strongly bound to the zeolite material and is not desorbed once the NO pressure used to load the gas onto the material is removed. The latter is a chemisorption process in which a chemical bond forms between the NO and the zeolite material.

The present claims relate to compositions for delivery of "irreversibly" or strongly bound nitric oxide to a human or animal subject. The current claims are based upon the Applicant's unexpected discovery that such "irreversibly" adsorbed nitric oxide could be released by action of a "trigger" mechanism. That is to say, the Applicant discovered that upon exposure to a nucleophilic medium such as moist gas or an aqueous solution, the NO that was "irreversibly" adsorbed within the zeolite was released. However, before the NO can be "irreversibly" adsorbed within a zeolite material, the zeolite must be activated to remove gas molecules from the pores and/or that are coordinated to extra framework metal sites in the zeolite framework. Typically, the gas molecules are water, such that complete or partial removal of the bound water thereby releases sites in the zeolite to which NO can "irreversibly" bind (e.g., a complex is formed between the extra-framework cations and the NO ligands attributable to a binding vacancy due to removal of water).

Thus, the Applicants realized that by providing a fully or partially dehydrated zeolite (i.e., one in which water has been completely or partially removed), nitric oxide can thereby bind "irreversibly" or strongly within the zeolite framework in readiness for delivery to a chosen target (e.g., a human or animal subject) by the action of (i.e., displacement by) an external nucleophile such as water (e.g., in the air or in a physiological fluid). See, e.g., Examples 6 and 7. (See also page 24, lines 8-9 and lines 28-31).

B. Cited Art

Zhang, et al. (Langmuir 1993, 9, 2337-2243). Zhang has been characterized extensively in Applicant's previous Amendment. Zhang is focused on developing a process to remove low concentration NO_x from air. More particularly, Zhang is concerned with evaluating metal-exchanged zeolites for use in pressure swing adsorption (PSA), where, as stated by Zhang, "the adsorbents for PSA must possess a high capacity for reversible adsorption of NO" (page 2337, first column, next to last sentence). PSA is a process whereby gases such as NO are adsorbed at high pressures and desorbed at low or atmospheric pressures, while absorption/desorption temperatures may vary. In Zhang, the effects of both pressure and temperature on NO adsorption and desorption are measured.

Salient features of Zhang include the following:

-Zhang is directed towards zeolite materials for removing NO_x from the environment through PSA (where adsorption/desorption of NO is promoted by extreme changes in pressure and temperature); in contrast, the Applicant's claims are directed to a pharmaceutical composition for storage and administration of NO to a human or animal (not for removing NO) under physiological conditions; that is to say, Zhang is not pertinent to the problem addressed by the instant claims;

-Zhang is concerned with zeolite materials having a high capacity for reversible adsorption of NO; Applicant's claims are concerned with just the opposite - i.e., zeolite materials in which NO is "irreversibly" or strongly bound;

-The absorption-desorption measurements of Zhang utilize high pressures of He (100 cm³/min) in a countercurrent flow to desorb NO (page 2338, first column), not displacement by water molecules at body or room temperature;

-The temperature-programmed desorption studies of Zhang (page 2338, second column, first full paragraph) utilize a helium purge (50 cm³/min) at temperatures ranging from 323 to 873 K (50°C to 600°C) for desorption of NO, not a chemical displacement reaction by exposure of the zeolite to water under mild conditions.

In sum, there is *nothing* in Zhang to suggest to one of skill in the art modification of the teachings therein to: (i) provide a zeolite composition for storage and subsequent release of NO for delivery to a human or animal, (ii) partially or fully dehydrate a metal-ion exchanged zeolite to thereby vacate sites for irreversible binding to NO, nor (iii) load or bind nitric oxide in an "irreversible" fashion in a partially or fully dehydrated zeolite framework, nor (iv) have any expectation of release of nitric oxide merely upon exposure of the zeolite to moisture at body or room temperature.

The characterizations of the remaining references have been previously presented and are reproduced here for the Examiner's convenience.

Wu et al. (US Patent No. 5,492,883). Wu describes a method of forming molecular sieves (e.g., zeolites) using aqueous emulsions of silicone resins rather than flammable solvents, and also describes the resulting monolith structures. Wu further describes water soluble binders useful for providing good zeolite extrudates using the method described (col 5, lines 52-63). Outside of its focus on zeolites, Wu is completely irrelevant to the instant claims, when considered either alone or in combination with any one or more of the references described herein.

Yamamoto et al. (JP 08092051 A). Yamamoto describes a deodorizing composition having the features of resistance to decoloration, good deodorant properties, and good dispersibility (prior compositions are described as having an unacceptable roughness). The compositions of Yamamoto include (i) an antibacterial zeolite having all or part of its ion-exchangeable ions exchanged with ammonium ions and antimicrobial metal ions, and (ii) silicone (e.g., silicone oil or volatile silicone), blended together. At most, in terms of relevance to the Applicant's claims, Yamamoto describes a cosmetic composition comprising a zeolite. Nowhere does Yamamoto suggest zeolites effective to store and release nitric oxide, let alone zeolites comprising extra-framework metal ions that

bind strongly ("irreversibly") to nitric oxide, wherein release of the bound nitric oxide occurs by exposure of the zeolite to moisture and subsequent displacement of the nitric oxide by water molecules at room or body temperature. There is nothing in Yamamoto suggestive of even a single of the Applicant's claims, when considered either alone or in combination with any one of more of the references described herein.

Green et al. (U.S. Patent No. 5,814,666). Green is concerned with providing compounds capable of releasing nitric oxide in an aqueous solution. The compounds of Green are nitric oxide-nucleophile complexes; illustrative complexes described include those having nucleophiles that are residues of a primary amine, or a secondary amine; or in which the nitric oxide is bound to a polymer such as polystyrene, polypropylene, polyurethanes and the like; Green also describes vesicles that encapsulate such nitric oxide-nucleophile complexes. Table 1 provides chemical formulas of complexes that are reported to be nitric oxide generators. Nowhere does Green suggest, in any fashion, a zeolite of any sort, let alone recognize or suggest particular properties effective for storing and releasing nitric oxide from a zeolite material. Green fails to suggest the subject matter of any one or more pending claims, when considering either singly, or in combination with any one or more of the references relied upon by the Examiner.

Barry et al. (WO 00/64506). Barry is directed to a medical stent having an inorganic antimicrobial agent on its surface such as a zeolite. The antimicrobial agent may be applied as a coating or blended with a polymer resin that forms the stent. Illustrative zeolites such as A-type, Y-type, T-type, sodalite, mordenite, analcime, and the like are described (page 13, lines 2-6). Preferred zeolites are described to contain antibiotic metal ions, such as those obtained through ion-exchange. Barry is not concerned with delivery of nitric oxide by zeolites of any sort, nor does Barry describe or even remotely suggest a zeolite, or any other material for that matter, for storing and subsequently releasing nitric oxide - from a stent or from any other article, let alone a mechanism by which such storage and release could effectively be achieved. As with the other references, Barry fails to

render obvious even a single of the Applicant's claims, when considered alone or in combination with any one or more of the references cited by the Examiner.

Rudolf et al. (J. Magnetic Resonance, 155, 45-56 (2002)). The article by Rudolf provides a study of adsorption and desorption behavior of nitric oxide in ZSM-5 and A-type zeolites by electron paramagnetic resonance or EPR. The NO molecules are used as a probe to characterize the Lewis acid properties of sodium cations (weak Lewis sites) and aluminum defects (strong Lewis sites) in various zeolites; the results are used to determine desorption energies at various adsorption sites in the zeolites. The zeolites examined were either non-ion exchanged (H-ZSM-5) or in their sodium form (Na-ZSM-5; Na-A).

The paper by Rudolf utilizes NO solely as a probe molecule, due to its magnetic properties and suitability for study by EPR spectroscopy. Rudolf has nothing to do with the delivery or storage of NO in zeolites, or in any other sort of material, for pharmaceutical, medical or any other purpose. Further, the adsorption and release of NO in the gas phase in the zeolites examined is facilitated by a change in temperature rather than by a chemical displacement reaction with water molecules.

As in the case of the other references relied upon, there is nothing in Rudolf that would suggest to one of skill in art, the subject matter of even one of the Applicant's pending claims, when considered either alone, or in combination with one or more of the cited references discussed in this section.

C. Arguments

As is well known by the Examiner, and as reiterated by the Supreme Court in *KSR International Co. v. Teleflex, Inc.*, 82 USPQ2d 1385, 1391 (2007), the framework that controls an objective analysis for determining whether claims are obvious is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Specifically, the *Graham* factors include:

- (i) determining the scope and content of the prior art;
- (ii) ascertaining the differences between the claimed invention and the prior art;
- (iii) resolving the level of ordinary skill in the pertinent art; and
- (iv) evaluating any objective indicia of nonobviousness.

The question to be asked is not whether the differences between the claims and the prior art would be obvious, but whether the claims *as a whole* would be obvious. See, e.g., MPEP, Section 2141.02 (1), as well as *Stratoflex, Inc. v Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983) as referenced therein.

It is submitted that the instant claims are non-obvious in view of the combination of prior art references relied upon by the Examiner in Rejections 1-4 in view of the characterizations of both the claims and prior art references provided above, further in view of the following arguments.

Considering Rejection 1:

The claims as currently amended are directed to a pharmaceutical composition for storage and subsequent release of nitric oxide (NO) *for delivery to a human or animal*, where the composition comprises:

a partially or fully dehydrated aluminosilicate zeolite, and

a pharmaceutically-acceptable carrier, where the partially or fully dehydrated zeolite comprises (i) extra-framework cations selected from the group consisting of Ca, Mg, Fe, Cu, Ru, Rh, Co, Ni, Zn and Ag, effective to bind nitric oxide, and (ii) nitric oxide bound to the extra-framework cations, whereby the nitric oxide is released by displacement by moisture upon exposure of the composition to moisture at body or room temperature.

1. Non-analogous art. In considering Zhang, Applicant submits that the Zhang reference should be regarded as non-analogous art, since although the reference is concerned with copper-ion exchanged zeolites, it is for the purpose of removing NO from

the environment through pressure swing adsorption (Zhang, page 2343, "Conclusions") under extreme conditions of pressure and temperature, not for providing pharmaceutical compositions for storing and releasing NO to a human or animal subject under mild conditions.

In considering the pertinent case law, a reference qualifies as prior art for an obviousness determination under 35 U.S.C. §103 only when it is analogous to the claimed invention. *Innovention Toys, LLC, v. MGA Entertainment, Inc.*, No. 2010-1290, slip op., at 12 (Fed. Cir., Mar 21, 2011); *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. In a recent CAFC case, *In re Klein*, , No. 2010-1411, decided June 6, 2011, Fed. Cir. 2011, quoting *In re Clay* (966 F.2d 656, 658 (Fed. Cir 1992), the court stated, "If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection." (The contrary of the foregoing then also must be true, i.e., if a reference is directed to a different purpose than the claims, the skilled artisan would have less motivation or occasion to consider it).

In the instant case, the problem addressed by Zhang is in a field completely unrelated to the subject matter of the Applicant's claims. Thus, Applicant submits that Zhang is non-analogous art and should be disqualified as prior art to the current claims.

2. Features of Claims Nowhere Suggested by Zhang

Even if, for the sake of argument, one skilled in the art were to rely upon Zhang, nowhere does Zhang describe or suggest a zeolite composition having the features recited in independent claim 1, let alone a single claim dependent thereon, nor provide the slightest motivation or rationale for substantially modifying the teachings therein to arrive at a composition such as claimed by the Applicant. Zhang is not directed to pharmaceutical compositions of any sort, nor to zeolite compositions for storing and releasing NO for

delivery to a human or animal at body or room temperature, nor to zeolite compositions which release NO under mild conditions upon exposure to moisture.

There is *nothing* in Zhang to suggest to one of skill in the art modification of the teachings therein to: (i) provide a zeolite composition for storage and subsequent release of NO for delivery to a human or animal, (ii) partially or fully dehydrate a metal-ion exchanged zeolite to thereby vacate sites for irreversible binding to NO, nor (iii) load or bind nitric oxide in an "irreversible" fashion in a partially or fully dehydrated zeolite framework, nor (iv) have any expectation of release of nitric oxide upon exposure of the zeolite to moisture at body or room temperature. Indeed, Zhang is in no way concerned with even a single of the foregoing features.

Regarding new claims 54-56 directed to a composition having at least the features of claim 1 in a sealed airtight package: there is nothing in the Zhang disclosure to suggest to one skilled in the art the relevance of protecting a zeolite composition having NO "irreversibly" bound thereto against moisture to prevent premature release of NO via displacement by water molecules by placing such a composition in a sealed airtight package.

In fact, one skilled in the art when considering Zhang, would conclude that zeolites *cannot* be used to deliver NO at room or body temperature in any useful manner. Zhang describes that there are two types of NO adsorbed onto a zeolite (which he refers to as reversible and irreversible). The reversibly bound NO is desorbed as soon as the NO gas atmosphere is removed from contacting the zeolite - therefore making such zeolites useless for storing or controllably releasing NO. What remains on the zeolites of Zhang is then irreversibly adsorbed NO, which Zhang shows cannot be delivered below 50°C. Therefore, in contrast to the Applicant's claims, Zhang teaches that one *cannot* use zeolites to deliver NO at room/body temperatures. Further, nowhere does Zhang suggest the utility of doing so, nor a method by which one could achieve such a result (i.e., the result being room/body temperature storage and subsequent release of NO from a zeolite).

Thus, when considered as a whole, in no way does Zhang render the instant claims obvious, when considered alone or in combination with Wu, since Wu fails to make up the deficiencies of Zhang.

Regarding Rejections 2-4:

Each of the remaining obviousness rejections rely upon Zhang as allegedly describing a zeolite having the features of at least claim 1, where the Examiner has turned to one or more of the secondary references Yamamoto, Green, Barry, Wu, and Rudolf, in combination with Zhang, to describe additional features recited in the dependent claims.

For at least the reasons provided above, i.e., both the non-analogous nature of the problem addressed by Zhang, as well as the failure of Zhang to describe or remotely suggest a composition and a zeolite as set forth in the Applicant's claims, Applicant submits that the claims recited in Rejections 2-4 must also be non-obvious, since the secondary references fail to make up the deficiencies of Zhang by failing to suggest a zeolite having the features recited in the instant claims.

Moreover, Applicant submits that one skilled in the art, having the Zhang reference in hand, would in no way be motivated to even consider or combine Zhang with any one of the Yamamoto, Green and/or Barry references, since the latter references are directed to therapeutic and/or cosmetic preparations while Zhang is directed to removal of low concentration of nitric oxides for the prevention of air pollution and acid rain.

In sum, for at least the foregoing reasons, each of the four combinations of references relied upon by the Examiner clearly fails to bridge the gap between the content therein and the Applicant's current claims. For at least the reasons provided herein, it is submitted that the claims currently pending are non-obvious in view of the art of record, and comply with the requirements of 35 U.S.C. §103.

Withdrawal of all outstanding rejections of the claims under 35 U.S.C. §103 is respectfully requested.

VI. Conclusion

In view of the foregoing amendments and arguments presented herein, it is submitted that the current claims comply with the standards of patentability. Withdrawal of all outstanding rejections is respectfully requested, and issuance of a Notice of Allowance is therefore earnestly solicited. If a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 590-1918.

The Commissioner is authorized to charge any time extension fee to Deposit Account No. 50-4616. The Commissioner is hereby authorized to charge any additional fees deemed to be due with the filing of this communication to Deposit Account No. 50-4616.

Respectfully submitted,

Date: November 21, 2011



Susan T. Evans
Registration No. 38,443
King & Spalding LLP

Correspondence Address:
CUSTOMER NO. 79975